ALEXANDER WILSON.

IV. The Making of the American Ornithology.

BY FRANK L. BURNS.

A nature lover from childhood, though placed at a trade at the early age of thirteen, Wilson probably learned a little, but not a great deal, more of the local avian fauna, than the average native sportsman. Immediately upon landing in America, at Newcastle, Delaware, July 14th, 1794, he shot the first bird that presented itself, a Red-headed Woodpecker, and he thought it the most beautiful bird he had ever beheld. On his way to Philadelphia curiosity prompted him to kill several Cardinals also; and somewhat to his surprise, he does not observe a single familiar bird, all appearing much richer in color than those he had been accustomed to see in his native land.

It was not until the comparatively lighter employment of school teaching, to which he eventually drifted, gave him the leisure which he at first unprofitably attempted to fill in verse-making; and after some years, his fortunate engagement as master of the little Union School in Kingsessing township, near Gray's Ferry on the Schuylkill river, then four miles from Philadelphia; brought him almost to the head of the short lane leading down to the famous botanic garden and the one man in all America able and unselfishly willing to initiate him into the mysteries and delights of ornithology; for William Bartram was one of Nature's noblemen. The intimacy formed with this kindly old gentleman, who became at once his "guide, philosopher and friend"; was as even flowing as a brook in a meadow on a calm summer day. Without a Bartram there probably would have been no Wilson, as Poet-Naturalist.

John Bartram, the founder, whom Linnæus pronounced the greatest self-taught botanist in the world, and whose proudest precept was to "Do justice, love mercy, and walk humbly before God"; was born March 23rd, 1699, and died on September 22nd, 1777, in deadly fear that the approaching British invaders would "lay waste his darling garden, the nursling of

almost half a century," and incomparably dearer to him than life itself. It is said that this indefatigable man planned and built with his own hands, the quaint old homestead in 1731, quarrying the stone on the place. True to his convictions he freed his blacks, paid them wages, taught them to read and write, patriarch-like placed them at the foot of his own table and took them to Quaker meeting on First-day. "There never was a purer, kinder, gentler-hearted man than John Bartram of Pennsylvania," and while his son "Billy" inherited neither his father's sturdy physique nor the old homestead, every virtue report gives the parent seems to have descended to the son.

Wilson had free access to the beautiful grounds, to the small but select library, and personal intercourse with the refined household. There he observed the wonders accomplished by the skill and industry of a single individual. When did the inspiration seize upon Wilson? Who can say. Perhaps while sauntering along the sylvan paths winding on the gentle slope above the river, musical with the voices of the many songsters; breathing the fragrance of the blossoms from many climes. Or may be while listening to the learned discourse of the amiable Author of "Travels through North and South Carolina." Or not at all improbable, insensibly, while in the act of detecting the errors and absurdities of European writers on our birds; for the privilege of contradiction is dear to the heart of every true Scotchman. But whatever the time and incident, the place must have been Bartram's Garden.

Wilson longed to accomplish something worth while. He had shown no special fitness for art or science, and its development depending entirely upon his own exertions would seem well nigh hopeless. He attempted to draw various objects, but on birds only succeeded in making passable representations.

Our first intimation of his intention is when he writes home to his friend Thomas Crichton, on June 1st, 1803, that he was about to make a collection of our finest birds. He reiterates this March 12th, 1804, in a letter to Alexander Lawson: "Six days in one week I have no more time than just to swallow my

meals, and return to my *Sanctum Sanctorum*. Five days of the following week are occupied in the same routine of *pedagoguing* matters; and the other two are sacrificed to that itch for drawing, which I caught from your honourable self. . . . I am most earnestly bent on pursuing my plan of making a collection of all the birds in this part of North America. . . .I have been so long accustomed to the building of airy castles and brain windmills, that it has become one of my earthly comforts, a sort of a rough bone, that amuses me when sated with the dull drudgery of life."

Seventeen days later, he writes to William Bartram: "I send for your amusement a few attempts at some of our indigenous birds, hoping that your good nature will excuse their deficiencies, while you point them out to me. . . .I am almost ashamed to send you these drawings; but I know your generous disposition will induce you to encourage one in whom you perceive a sincere and eager wish to do well. They were chiefly colored by candle-light. I have now got my collection of native birds considerably enlarged; and shall endeavor, if possible, to obtain all the smaller ones this summer. Be pleased to mark on the drawings, with a pencil, the names of each kind, as, except three or four, I do not know them." May 1st, 1804, he again writes: ". . . .I send you a few imitations of birds for your opinion, which I value beyond that of anybody else, though I am seriously apprehensive that I am troublesome. These are the last I shall draw for some time, as the employment consumes every leisure moment, leaving nothing for friendship or those rural recreations which I so much delight in. Even poetry, whose heavenly enthusiasm I used to glory in, can hardly ever find me at home, so much has this bewitching amusement engrossed all my senses." Poetry drew him aside for a time, however; his "Rural Walk," "The Solitary Tutor," and perhaps some other much less meritorious rhymes came from his pen.

The solitary hours of the following winter were devoted to the partial composition of a long poem containing 2218 lines descriptive of his journey the previous autumn to the Niagara

Falls, otherwise the winter appears entirely lost to him, owing to the widespread poverty and his inability to collect barely enough from his school to pay his board; so that it was not until the following spring that he began drawing the Canada Jay and Northern Shrike, the supposedly new birds he had brought from the Mohawk; finishing them in ten days, far superior to anything before attempted. Wilson discovered ere long that he had genius for has not genius been defined as infinite patience or the union of passion and patience?

His last drawings were transmitted to Thomas Jefferson, from whom he received a most kindly acknowledgement; and the mention of a mysterious bird the President was unable to fully describe, throws Wilson into a fever of excitement to procure. As Bartram surmises, it proves to be the Wood Thrush.

July 2nd, 1805, he again addresses Bartram: "I dare say you will smile at my presumption, when I tell you that I have seriously begun to make a collection of drawings of the birds to be found in Pennsylvania, or that occasionally pass through it; twenty-eight, as a beginning, I send for your opinion. They are, I hope, inferior to what I shall produce, though as close copies of the original as I could make. One or two of these I cannot find either in your nomenclature, or among the seven volumes of Edwards. . . . Criticise these, my dear friend, without fear of offending me—this will instruct, but not discourage me.—For there is not among all our naturalists, one who knows so well what they are, and how they ought to be represented. . . . To your advice and encouraging encomiums I am indebted for these few specimens and all that will follow."

The discovery that many years before, Edwards had etched the plates of his own series of volumes on Natural history, was responsible for a like attempt by Wilson under the instruction of Lawson. The first plate was a failure, but in the transmission of a proof of the second, January 4th, 1806, he announces his ambition to publish: "Mr. Wilson's affectionate compliments to Mr. Bartram; and sends for his amusement and correction, another proof of his Birds of the United

States." Thus the first two plates of his American Ornithology were produced by the author himself in a fairly creditable manner, but fell short of his own expectations; and as neither Lawson nor Bartram were prepared to assume a part of the sacrifice the series of engraved and colored plates would entail, his resolution of proceeding alone "even if it should cost him his life," was necessarily held in abeyance until he could find a publisher or the means of publishing it himself.

Wilson next offered his services in the interest of Natural science to the President, having heard of a proposed expedition under Captain Zebulan M. Pike to the Arkansas and Red rivers, to which he was desirous of being attached; but nothing came of it. In fact Jefferson never received his application and enclosed recommendation from Bartram. This expedition, which was a purely military one, comprising two lieutenants, one surgeon, one sergeant, two corporals, sixteen privates, and one interpreter; departed from near St. Louis on July 15th, 1806.

However, the near future had something better in store for him. On April 1st, after ten stormy years of pedagoging, he resigned to accept the assistant editorship of a revised edition of Ree's New Cyclopædia, about to be published in 22 quarto volumes by the firm of Samuel F. Bradford in Philadelphia. The articles of agreement were signed on the 20th. His duties seem to have been a critical reading of a former edition, making additions and corrections before going to press; proof reading and general supervision. Leslie states that he also served as tutor to Mr. Bradford's sons. His salary of $900, was extremely liberal for that period, no doubt. It was not long before he had a favorable hearing with his employer, in the interest of his cherished plan of an American Ornithology. By his agreement it appears that he was to furnish all of the drawings and the text for the work, and the publishers were to advance the funds for the mechanical execution and advertisement. Wilson was about to realize his dreams of fame, but at an enormous sacrifice, entailing journeys through an undeveloped country aggregating over ten thousand miles, re-

buffs unnumbered, unceasing toil day and night for a period of seven years, without a pecunary gain of one cent. He had already upward of one hundred drawings, many of which he used in the total of three hundred and twenty figures, as given by Ord. Leslie, who was an apprentice from 1808 to 1811 to Messrs. Bradford and Inskeep, Booksellers, observes: "I assisted him to color some of his first plates. We worked from birds he had shot and stuffed; and I well remember the extreme accuracy of his drawings, and how carefully he had counted the number of scales on the tiny legs and feet of his subjects. . . . Mr. Bradford was the most enterprising publisher in America, and determined to make the 'Ornithology' as far as he had to do with it, in the highest degree creditable to his country. The types, which were very beautiful, were cast in America. . . . (by Binney and Ronaldson); and though at that time paper was largely imported, he determined that the paper should be of American manufacture; and I remember that Ames, the papermaker, carried his patriotism so far that he would use only American rags in making it. The result was that the book far surpassed any other that had appeared in that country; and I apprehend, though it may have been equaled in typography, has not before or since been equaled in its matter or plates. Unfortunately Wilson's book was necessarily expensive and therefore not remunerative, but nothing discouraged him." [1]

Wilson states in the preface of his second volume: "Hitherto, the whole materials and mechanical parts of this publication have been the production of the United States, except the colors . . . . it is not without regret and mortification, he is obliged to confess that, for these, he has been principally indebted to Europe. . . . In the present volume, some beautiful native ochres have been introduced; and one of the richest yellows is from the laboratory of Messrs. Peale and Son of the Museum of this City. Other tints of equal excellence are confidently expected from the same quarter." He also acknowledges the professional talents and constant attention of the

[1] Leslie's Autobiographical Recollections.

printers, Messrs. R. and W. Carr, as well as the merits of Messrs. Lawson, Murry and Warnicke, in a later volume. He soon found, however, that he could place no dependance in Murry;[1] and stated to his nephew, William Duncan, "I mean to make it consistant both with the fame, and the interest, of Lawson to do his best for me."

Lawson needed no spur. He was so anxious to encourage his friend, that frequently after computing the time spent upon perfecting his work, he found his reward did not amount to more than *fifty cents* per day.[2] Think of one of the most expert copper-plate engravers in all America, working for so mean a pittance. This was friendship of the most substantial kind to Wilson.

By April 8th, 1807, Wilson had received the proofs of the prospectus, 2500 copies of which were printed on fine paper; and one of the plates having been completely finished by Lawson, the copper-plate printer set to work immediately to print each bird in its natural colors in place of the customary black ink, which would have affected the finer tints of hand-coloring; and before May 22nd, impressions of the first two plates delivered. Wilson taking the responsibility of securing well-colored specimen sheets for Boston, New York, Charleston, and elsewhere; experienced some difficulty in laying on the color wash. While in New York city, October 2nd, in the interests of his employers, he met Robert Fulton, who became a subscriber. Close and constant application to his manifold engagements during the summer, affected his health, but he could not be induced to take a collecting trip through the State until August. Finally in September, 1808, an edition of 200 copies of the initial volume, consisting of 6 pages of preface, 158 pages of text, and 9 beautiful plates exhibiting 34 hand-colored figures of birds, appeared: to be sold by subscription at $12. per copy.

[1] George Murry, a native of Scotland, removed to Philadelphia about 1800. Engraved Ree's Cyclopedia. Senior member of the firm of banknote engravers: Murry, Draper, Fairman & Co. Reckless and improvident, died poor about 1822.

[2] Ord's Life of Wilson.

On the 21st, Wilson set out to visit the Eastern States "as far as the District of Maine," by stage coach, on a canvassing tour. His plan upon entering a town, was to write a note enclosing prospectus to every one at all likely to subscribe, and shortly afterward to call at each address. Visiting Princeton, New Brunswick, Elizabeth and Newark; he arrived at New York, where he met with a brother Scotchman, also a Wilson and a Professor in Columbia College, who seemed to feel all the pride of national partiality so common to his countrymen and offered to do any favor in his power. On October 2nd, he took a packet for New Haven, where he was received with politeness and respect; thence up the Connecticut valley, in which he doubtless discovered his first Connecticut Warbler; through Middletown and Hartford, to Springfield; and then via Worcester to Boston, arriving about the 9th

Compliments were received in abundance, but $120., the price of the proposed set of volumes, was another matter. He writes from the latter place under the date of October 10th: "If I have been mistaken in publishing a work too good for the country, it is a fault not likely to be repeated, and will pretty severely correct itself."

In a week he continued to Salem and Newburyport, and through a portion of New Hampshire to Portland, Maine. From this place he steered across the country for the northern parts of Vermont, among barren, savage, pine-covered mountains; calling on the president of Dartmouth College at Hanover, who subscribed as did all the college heads visited in New England; and writes from Windsor on October 26th that he expected to be in Albany in five days. While he was well received at all seats of learning and mingled on terms of equality with some of the best men of the day, it appears from his Albany letter of November 3rd, that he did not average a subscription a day. A most discouraging failure to one less determined than himself. Daniel D. Tompkins, then Governor of New York and afterward twice Vice President of the United States; after turning over a few pages and looking at a picture or two, upon learning the price, closed the book and

bruskly said: "I would not give a hundred dollars for all the birds you intend to describe, even had I them alive." An exposition of stolid ignorance masquerading as good solid "horse-sense" that deeply offended Wilson. In De Witt Clinton he found an efficient public man better able to appreciate the service he was doing the country.

Almost immediately after returning to the Quaker city, he proceeded southward on horseback. At Havre de Grace and other points on the Chesapeake, he gathered additional information on the habits of the Ducks, particularly the Canvas-back, in early December. Baltimore, where he spent almost a week, yielded him sixteen subscribers; Annapolis none. Nowise discouraged, he proceeded thirty-eight miles through tobacco fields, sloughs, and swamps to the National Capital, dismounting in the mud fifty-five times to open as many gates enroute. He was received and encouraged by President Jefferson and others in a most substantial manner. Georgetown and Alexandria were canvassed about Christmas, and the southern peregrination continued. At Fredericksburg he found the Mockingbird as a permanent resident. Richmond, Petersburgh, Williamsburgh, Hampton, Norfolk and Suffolk, all increased his subscription list. Crossing over the flooded Nottoway near Jerusalem in a flat boat, he proceeded through solitary pine woods, perpetually interrupted by flooded swamps, which were often covered with a thin sheet of ice from half an inch to an inch thick, cutting his horse's legs and breast. Sometimes wading, sometimes swimming bridge approaches, the Roanoke river balked him at three different ferries, thirty-five miles apart; at last he succeeded in crossing at a place fifteen miles below Halifax about January 20th, 1809. A violent snow storm made the roads still more execrable. The Tar river was crossed near Washington and New Berne approached. From here on the 5th of February he noted the disappearance of frost and the opening of the shad season, and met with the Swamp Sparrow, in considerable numbers on the banks of the Trent. He had already discovered the Red-cockaded Woodpecker and Pine Warbler, in the immense, solitary, pine savannas; and on his

next stage of the journey, one hundred miles to Wilmington and only a single house for the accommodation of travelers, on the road; expatiates on the enormous cypress swamps. "Picture to yourself a forest of prodigious trees, rising, as thick as they can grow, from a vast and impenetrable morass, covered for ten feet from the ground with reeds. The leafless limbs of the cypresses are clothed with an extraordinary kind of moss (*Tillandsia usneoides*), from two to ten feet long, in such quantities that fifty men might conceal themselves in one tree. Nothing in this country struck me with such surprise as the prospect of several thousand acres of such timber, loaded, as it were, with many million tons of tow waving in the wind. I attempted to penetrate several of these swamps, with my gun, in search of something new; but, except in some chance places, I found it altogether impracticable." Yet about twelve miles north of Wilmington he succeeded in killing two, and capturing the third Ivory-billed Woodpecker; the latter being only wing-tipped, uttered a most piteous note, exactly resembling the violent crying of a young child. Placing it under cover, he rode on to the town, "arriving at the piazza of the hotel, where I intended to put up, the landlord came forward, and a number of other persons who happened to be there, all equally alarmed at what they heard; this was greatly increased by my asking him whether he could furnish me with accommodations for myself and my baby. The man looked blank and foolish, while the others stared with still greater astonishment. After diverting myself for a minute or two at their expense, I drew my Woodpecker from under the cover, and a general laugh took place." The bird had its revenge later, however; for when left alone in a room, it wrecked a mahogany table and almost cut its way through lath and plaster to freedom.

From Wilmington, he rode through pine savannas and cypress swamps, as before; sometimes thirty miles at a stretch without seeing a cabin or human being. On arriving at the Wackamaw, Pedee and Black river region, he took long zigzag journeys among the wealthy rice planters, receiving cordial welcome. Forty-two miles north of this region, he had been

enabled to make an advantageous trade in horse flesh; his animal having shown signs of giving out in the deep sands of South Carolina. A planter took a fancy to it; and in exchange, Wilson received a vicious sorrel with plenty of endurance, which at once ran away with him at a canter for fifteen miles, and traveled forty-two miles the first day with but a few mouthfuls of rice straw to eat; and at the Georgetown ferry, threw one of the boatmen in the river. Charleston was reached about the middle of February; at any rate he arrived in time to preside at a singular feast on the 21st at Hampstead, a suburb; in which the carcass of a horse served as the *piece de resistance*, and 237 Black Vultures, with several dogs, the self-invited guests. Here he records a total of 125 subscribers since leaving home, and here it was a Scotchman again, that came to his aid, giving him a list of prospective subscribers taken from the directory, among whom he expends ten days with good results, departing on the 23rd for Savannah. While being ferried over the flooded Savannah river, at the Two Sister's Ferry, his horse threw himself overboard, and had not Wilson rescued him at a great personal risk, the animal would doubtless have been lost. In this vicinity he had the best fortune of the trip, ornithologically it yielding the Great White and Louisiana Herons, Fish Crow, Savannah Sparrow and Yellow-throated Warbler. He notes the Brown Thrasher in full song on March 1st and the Mockingbird one day later. From a collector's standpoint, he could not have chosen a more unseasonable time for his trips. From the northern parts of the district of Maine to the Ogechee river in Georgia, a distance of more than 1800 miles by the circuitous route in which he traveled, he never passed a day and scarcely a mile without seeing numbers of the Snowbird or Slate-colored Junco. However he had accomplished his mission of securing a total of two hundred and fifty subscribers, "obtained at a price worth five times their amount," as he writes on March 5th. He had visited every town of importance within one hundred and fifty miles of the Atlantic coast from the St. Lawence river to Savannah. He had endeavored to make arrangements at every town with depend-

able subscribers to deliver the volumes as issued without recompense other than the privilege of first choice. He had collected a great mass of personal information respecting the birds of the South, but in this "the most ardous, expensive and fatiguing expedition," he had expended all his savings. It would appear from his letter to his father,[1] dated from Philadelphia, June 15th, "about two months" after his return by sea; that he had been as far south as St. Augustine, Florida; but as his funds were too nearly exhausted to permit him to visit Augusta, where he was told twelve or fifteen subscribers awaited him, and there are no other evidences in his published writings that he ever visited the mainland of that State; it is doubtless an error. It is evident, however, that he was as far south as the Altamaha river, where he noted the Pileated Woodpecker, and the Myrtle Warbler, "as late as the middle of March." He recorded the Hooded Warbler at Savannah "about the 20th of March," but it must have been a little earlier, for he announced his arrival at New York, on his way home, on the 22nd of the same month.[2]

Wilson had not yet relinquished his position as Assistant Editor of the Cyclopædia, but doubtless did so previous to his Western trip, which began January 30th, 1810, shortly after the second volume of his Ornithology appeared. His success during the last trip had encouraged the publishers to increase the edition to 500; if indeed that number of subscriptions were not absolutely necessary to meet expenses. On foot he worked through the small towns of Southern Pennsylvania: Lancaster,—the State Capitol, where Governor Simon Snyder passed some good natured compliments on the work as he readily added his name, and three sets were contracted for the Legislature; Columbia, York, Hanover,—where he so neatly turned the argument upon Judge Hustetter,[3] who had taken it upon himself to remark that the book "ought not to be encouraged, as it was not within the reach of the com-

[1] Crichton's Life of Wilson.

[2] See remarks under the head of the Mockingbird, American Ornithology.

[3] Coues, Penn Monthly, 1879, p. 443.

monality; therefore inconsistant with our republican institutions." By the same mode of reasoning which he did not dispute, Wilson "undertook to prove him a greater culprit, in erecting a large, elegant, three story brick house, so much beyond the reach of the commonality, as he called them, and consequently grossly contrary to our republican institutions." From Hanover he crossed the North mountains at Newman's Gap and arrived at Chambersburg. The next morning he doubled on his track, almost, to visit Dickinson College at Carlisle, and returned via Shippensburgh, departed by stage from Chambersburg on the 11th of February; the last two towns producing him nothing. Ascending the Allegheny mountains, passing through Somerset and Greensburg, he arrived at Pittsburg on the 15th. On February 22nd began that romantic voyage in the wilderness, fraught with so much hazard and hardship. Procuring a skiff which he named the Ornithologist, he rowed down the Ohio 720 miles, putting up at the shore wherever curiosity impelled or storm compelled; composing the "Pilgrim," and complaining little because the rifle, ax and plough were in greater demand on the frontier than the book.

The great number of flat and house boats loaded with merchandise descending the great Ohio and its tributaries, prevented him from being lonely, and at Steubenville and Wheeling he found some friends. While at Marietta he visited the celebrated prehistoric Indian mounds on the banks of the Muskingum, ascending that stream seventy miles to Big Bone creek and attempted a little excavating for relics on his own hook. Blannerhasset's island, but recently a place of national consequence, was passed in the night. Gallipolis, the mouths of the Sandy and Sciota rivers were successively left behind; the last being where the first flock of Carolina Paroquets were encountered, also a violent storm of wind and rain. The savage grandeur and picturesque scenery of the river, winding through forest-clad hills and an immense country, impressed him greatly. At Salt Lick he was curious to learn of further finds of fossil remains. He arrived at Cincinnati and Newport by

March 9th amidst very tempestous weather. Here he examined the collection of Indian relics possessed by Dr. Drake, and the inhabitants are described as a very thoughtful people, i. e. when approached for subscriptions, they promised to think of it. He rambled up the banks of the Great Miami, twenty miles below, for four or five miles, and shot a Wild Turkey and saw several deer. On the afternoon of the 15th, he entered the Big Bone creek, and securing his boat, rambled through the woods to Big Bone Lick, the ancient rendezvous of the mastodon; securing fourteen Paroquets on his return, and stopping the next night at the Swiss settlement of vine growers. During the following day he passed the mouth of the Kentucky and was very much disgusted to have to lodge at a wretched hovel and listen to the tales of a braggard, the last night on the river. Although an early start was taken in the morning, an unsuccessful turkey hunt detained him so long that night came on before he heard the roaring of the rapids. Cautiously coasting the Kentucky shore, for he was greatly alarmed, a haven was found at Bear Grass creek, and he groped his way through a swamp to the town of Louisville, March 17th; and the end of the first stage of his journey was successfully reached. The next day he sold his skiff for exactly half of what it had cost him, the purchaser wondering why he had given it so droll an "Indian" name.

At Pittsburg, Long Reach, Cincinnati and Bairdstown he had recorded the Snowy Owl. He had now arrived in a country at the proper time in which to look for something more than "Snowbirds and sparrows." Here he came unexpectedly upon Audubon engaged in drawing birds in crayons at his place of business and later enjoyed an afternoon's shooting with him. As it happened, he had put up at the house in which Audubon and family made their home. The lively Frenchman thought that Wilson's retired habits exhibited either a strong discontent or a decided melancholy, and the Scotch airs he played sweetly on his flute made Audubon melancholy too. Wilson was bitterly disappointed in Louisville, of which he had been led to expect so much of everything and received so little

of anything. On March 24th, after leaving his baggage in care of a merchant, to be shipped to Lexington, he pushed on via Middletown and Shelbyville, on foot, for Frankfort. Before reaching the latter, he went aside a short distance to examine the remains of an extensive Pigeon roost, wading the deep Benson creek nine or ten times. At one o'clock the birds were flying in with great steadiness and rapidity, at a height beyond gunshot, in several stratas deep. From right to left as far as the eye could reach, the breadth of this vast procession extended, seeming everywhere equally crowded. At four o'clock, Wilson crossed the Kentucky river at Frankfort, yet the living torrent seemed as numerous and as extensive as ever. Several days were spent in this town and in rambling among the stupendous cliffs of the river. Lexington was reached on March 29th and considerable time spent in this interesting place. Procuring a saddle horse, he continued his journey toward Nashville, Tennessee, 200 miles distant. Somewhere in the neighborhood of Nicholasville, perhaps, he overtook a man mending his stirrup-leathers, who after he had walked around him several times, observed that he appeared to be armed. And small wonder, for Wilson had a loaded pistol in either pocket, a loaded fowling-piece strapped across his shoulders, five pounds of shot in a belt and a pound of powder in a flask. The stranger proved a most zealous Methodist, and as they traveled together for mutual protection, Wilson found a hymn in his companion's book nearly answering to Jones' song of the "Vicar and Moses" and that soon became a favorite air with them. He labored earnestly to make a convert of Wilson. The spectacle of the latter galloping down hill, with the preacher following as best he could, and shouting his exhortions with great vehemence, must have been a refreshing one. He often took care of the ornithologist's horse, while he went off into the woods after strange birds. Crossing the Kentucky river for the last time, in a few more miles a descent was again made to Dick's river, and Danville reached in the dark. Near here the Kentucky Warbler was discovered about the middle of the month.

On April 17th, 49 miles beyond Danville, in Green County, the most extensive breeding ground of the Passenger Pigeon in the State was penetrated for three miles. The trees, chiefly beech, were loaded with nests, and the length of the colony said to be over forty miles! Wilson does some figuring of the total number of individuals of this species seen on the entire trip and places it at 2,230,272,000! Quite interesting in view of the fact that the bird is now in all probability practically extinct. Lodging near the banks of the Green river, they crossed the Little Barren on the afternoon of the following day. Here the whole country began to assume a new and very singular appearance; the woods which hitherto had been stately, now degenerated into mere scrubby saplings and the earth was covered with rich vendure, interspersed with a variety of very beautiful flowers; and the enormous caverns of Warren county especially astonished Wilson. After being ferried over Big Barren river, and fifteen miles beyond Bowling Green, he was induced by the novel character of the country to bid farewell to his Psalm-singing friend, and tarry for five days at the house of a pious and worthy Presbyterian, who charged him nothing and would have gladly kept him a month for the drawing lessons he gave the daughters. Making excursions in all directions, he added the Prairie Warbler to his list of new birds, and here found the Whippoorwill more numerous than in any other part of the country. Once more taking to the saddle and crossing the Red river, he found no more "barrens," but as he entered Tennessee, the face of the country became hilly and even mountainous. Coursing along the rich valley of Mansker's creek, near the Cumberland river, he stopped at a small tavern kept by Isaac Walton; and here quite probably, added the Tennessee and Nashville Warblers to our fauna, as well as figuring the female of his already described Cerulean Warbler as another nondescript. When he departed, the landlord, a most worthy namesake of that great disciple of the gentle art of fishing; refused to accept anything for his fare, saying: "You seem to be traveling for the good of the world; and I cannot, I will not charge you anything. Whenever you come

this way, call and stay with me. You shall be welcome." Entering Nashville April 26th, he busied himself drawing the new specimens and prepared for the trip through the Indian country; departing on May 4th. Swimming the Great Harpath, he rode in his wet clothes without inconvenience. Meeting with the Swallow-tailed Kite at Duck creek, he now observed growing cane, and the naked negro children in the solitary clearings. Before proceeding to the Buffalo river, he turned aside to visit the last resting place of his late friend, Captain George Merriwether Lewis, the explorer associated with Gen. William Clark in the Government Expedition across the Continent. After listening to Madam Grinder's unsatisfactory account of the suicide or murder, he gave from his own scanty means the money for a fence around the grave to shelter it from the hogs and wolves. This incident threw Wilson into a very melancholy mood, which the gloomy and savage wilderness of forest, cane and morass he was just entering, did not tend to allay; and to give vent to the despondency of his mind, he composed a poem which he dedicated "In Memory of Captain Lewis":

> "Unhappy youth! here rest thy head.
> Beloved, lamented by the brave;
> Though silent deserts round thee spread,
> And wild beasts trample o'er thy grave."

Entering the Chickasaw country, he slept the first night in one of their huts. Floundering through one bad swamp after another to the banks of the Tennessee, he was obliged to encamp for the night with the gnats, Owls and Chuck-will's-widow for company; and to his rage the ferryman did not appear until 11 o'clock of the next day. At Bear creek, entering the extreme north-east corner of the present State of Mississippi, but recently ceded and still known as West Florida; he first observed the Indian boys with blow guns; long hollow tubes of cane, through which a slender dart covered at the base with thistle-down is expelled with violence at a puff of the breath. The Cerulean Warbler, so rare in the East, became the most common of its tribe here.

Horrid swamps, poisonous water, prodigous growth of cane and high woods shutting out the light of day! Horse bemired, from which nothing but great strength and exertion would rescue him. General Wade Hampton was met and looked anxious when told what was before him, a convalescent. Wilson passed through the Chickasaw Bigtown. Already the poisonous swamp water, burning sun, and reeking clothing, had brought on an attack of dysentery which threatened to make an end of him in the lonely country of the Choctaw nation. An Indian recommended the ripe and abundant wild strawberry, and Wilson kept up his strength with newly laid eggs, eaten raw, to which he credits the cure, after some days in which he could hardly keep the saddle. On May 12th, he noted the nest of an Olive-backed? Thrush which he mistook for that of the Hermit Thrush. At length, on May 18th, the journey of 478 miles from Nashville lands him at Natchez, on the banks of the Mississippi; "through difficulties, which those who have never passed the road, could have no conception of"; guarding his precious book and specimens from the ravages of the elements throughout that long, lonely journey, and to the astonishment of the boatman, without whisky; the pages of history do not contain a better example of dauntless pertinacity of purpose.

What must have been his gratification upon emerging from the wilderness, to receive a note from William Dunbar, a subscriber, living nine miles below Natchez; the bearer attending with two horses: " . . . . I understand from my boy, that you propose going in a few days to New Orleans, where you will see some small cabinets of natural history that may interest you. But, as I presume it is your intention to prosecute your enquiries into the interior of our country, this cannot be done better than from my house, as your headquarters. My house stands literally in the forest, and your beautiful orioles, with other elegant birds, are our courtyard companions. . . ." The novelty of being welcomed by a perfect stranger, led him to ride out on May 23rd, and spend several pleasant and profitable days; for here he procured the Mississippi Kite, and later,

through the kindness of his host, the Roseate Spoonbill. The last lap of 252 miles of the land journey, brought him to New Orleans; not however before he had visited his hospitable friend, Dr. Samuel Brown, near Fort Adams at the extreme southwestern part of the State—here the association of the magnolia with the warbler of that name. Arriving at the Crescent city on June 6th, another surprise awaited him in the shape of sixty subscribers, by the 30th, on which date he took passage on a ship bound for New York. Becalmed for twenty days in the Gulf of Mexico and carried by currents as far south as Cape Antonia, the westernmost extremity of Cuba; he met with the White Ibis again on the low keys off the peninsula of Florida, having first observed it in June on the borders of Lake Pontchartrain, Louisiana; also in passing along the northern coast of Cuba, and the coasts of Florida and Georgia, in July, the Sooty Tern was found very numerous, and Wilson shot and dissected several. In passing the coasts of Florida and the Carolinas, great numbers of Wilson's Petrals were encountered and notwithstanding the superstitious fears of the seamen, fourteen specimens were shot on a calm day and a boat lowered to pick them up, some eighty or ninety miles off the coasts of South Carolina. Wilson reached Philadelphia on the 2nd of August, 1810. It is stated that his total expenses up to his arrival at New York, were only $455.

The third and fourth volumes appeared during February and September, 1811, and the fifth and sixth numbers, in February and August, 1812; Wilson taking frequent short excursions in search of material, particularly to the Blue mountains in Northhampton county, where he doubtless secured his Blue Mountain Warbler; and the headwaters of the Lehigh and Pocono region, Pennsylvania; where he killed the American Crossbill, Wilson's Thrush, and became more intimately acquainted with many of our Warblers. During this time he resided at the Bartram homestead, and here in an atmosphere most congenial to literary labor, composed much of his Ornithology. Soon after the sixth volume was brought from the press, he undertook a second journey into the Eastern

States for the purpose of visiting his subscribers and settling accounts with his agents. The route from New York, was up the Hudson to Albany, to Lake Champlain, along which he coasted as far as Burlington, Vermont, by September 23, 1812; then overland through the rugged mountain region to the Connecticut and down the river to Haverhill, where he was arrested on suspicion of being a spy from Canada, after he had ascended one of the highest peaks of the White mountains for the sublime view it afforded him; but was soon released with many apologies for the mistake. Continuing down the river to Hanover, New Hampshire, he took the shortest route to Boston, Portsmouth and Portland. With his face toward home, he wrote from Boston, October 13th, "In New England the rage of war, the virulence of politics, and the persuit of commercial speculations, engross every faculty," and complained of a violent palpitation of the heart.

The seventh volume appearing late in April or early May, 1813, Wilson, accompanied by Ord, spent four weeks at Great Egg Harbor, so named because of the great number of eggs to be found there during the breeding season. This was the last of six trips to the New Jersey coast in pursuit of the Water Birds. On his return he had looked forward to spending the summer with his friend Bartram, but the press of work incident to his earnest desire to an early completion of the work, prevented this; and in a letter dated July 6th, he writes to Bartram: "I am myself far from being in good health. Intense application to study has hurt me much. My 8th volume is now in press and will be published in November. One volume more will complete the whole." Wilson's sole resources since he relinquished his superintendence of the Cyclopædia, were his receipts from the publishers for the coloring of the plates of his work! He states in his preface of Vol. IV, September 12th, 1811, "the correct execution of the plates will be rendered more secure, by the constant superintendence of the Author; and by the whole of the coloring being performed in his own room, under his immediate inspection. The great precision requisite in the last process, and the difficulty of impressing on

the minds of every one whose assistance was necessary, similiar ideas of neatness and accuracy, have been a constant source of anxiety to the Author, and of much loss and delay. These difficulties have at length been surmounted, by procuring the services of two able assistants." April 21st, 1813, he informs Bartram: "I have been extremely busy these several months, my colorists having all left me; so I have been obliged to do extra duty this last winter." His one fault, irritability, which was said to have counteracted in some measure the good effect his high moral character produced, no doubt contributed largely to his loss of help at this most critical period. Never of the most robust health, he continued to draw on the apparently superabundance of nervous energy; but he had disregarded the laws of health so often, he could not forever remain immune.

Weighed down by care, ill health and incessant toil; he one day conversed at the house of a friend, when he observed a bird for which he had long been in search; but before he obtained the object of his eager pursuit, he had to swim across a stream; a cold resulted, bringing on his old complaint, dysentery; and debilitated as he was, it resulted in death ten days later, August 23rd, 1813, in his forty-eighth year. His brother David said: "The moment that I heard of his sickness, I went to the city, and found him speechless; I caught his hand, he seemed to know me, and that was all. He died the next morning at 9 o'clock." Ord states that "while in the enjoyment of health, he had conversed with a friend on the subject of his death, and expressed a wish to be buried in some rural spot, sacred to peace and solitude, whether the charms of nature might invite the steps of the votary of the Muses, and the lover of science, and where the birds might sing over his grave." But his wish was not made known at the time or it would have been piously observed. They laid his remains in the little yard of Gloria Dei, the Old Swedish Church, at Swanson, near Front Street; and placed over it a plain slab of marble. No costly monument is required to perpetuate his memory as the Father of American Ornithology.